© Crown copyright • www.metoffice.gov.uk

Energy industry set for climate change

28 November 2008

The UK energy industry is now much more prepared for the impacts of climate change, an innovative study has revealed today.

Results from the ground-breaking project between key UK energy companies and the Met Office have highlighted that the majority of energy infrastructure is already fit to meet the challenges of a changing climate.

However, the study has also shown that more needs to be done by the industry to help it prepare for predicted rises in temperature in the future.

A clear indicator from the project was that historical climatology is no longer relevant because of global warming. These long-term changes mean that it is likely that energy demands will be affected through the seasons.

Within the next 10 years higher temperatures could increase electricity requirements during the summer, as air conditioning units become more widely used.

Change in demand was one of two broad areas the project highlighted, with developing and adapting technology to future climate being another major factor.

This included the prospect of reduced efficiency for the output of thermal power stations, as a result of higher summer temperatures. The study recommended that adaptation to climate change should now be considered, especially when redesigning or building new power plants.

John Hirst, Met Office Chief Executive said: "This innovative Met Office project builds climate science into operational planning and showcases the energy industry's commitment to respond to a changing climate."

Meanwhile, Energy and Climate Change Minister Mike O'Brien welcomed the report: "Cutting emissions from energy plants is a crucial part of how we are tackling climate change, but our energy networks themselves must also be resilient to the changing world in which they operate.

"Energy infrastructure is costly and can have a lifespan of 40 or more years, so it's a smart move for the energy industry to seek the expert advice of the Met Office Hadley Centre. This will help anticipate the potential impacts of climate change and allow the industry to future-proof what it builds in the coming years."

Find out more about the climate study

Visit the Climate Change Centre

Notes

- The study has also covered the possible impacts on coastal infrastructure, how wind resources may be affected, and how the efficiency of cables is affected by an increase in temperatures.
- The Met Office Hadley Centre is the UK's foremost centre for climate change research. Partly funded by Defra (the Department for Environment, Food and Rural Affairs), the newly-established Department for Energy and Climate Change and the Ministry of Defence it provides information and advice to the UK Government on climate change issues.
- Of the eleven energy companies involved not one is a lead. Those taking part are C.E. Electric UK, Centrica, EDF Energy, E-ON, National Grid, Northern Ireland Electricity, RWE nPower, Scottish Power, Scottish and Southern Energy, United Utilities and Western Power Distribution.